

REMARKS/ARGUMENTS

Claims 1-16 are active in this application.

In view of the cancellation of Claim 17, Applicants request the rejection under 35 U.S.C. § 102(b) be withdrawn.

Applicants thank the Examiner for indicating that Claims 1-16 are allowable over the prior art of record (see page 7 of the Official Action). In view of the following remarks, Applicants request withdrawal of the rejections under 35 U.S.C. § 112, second paragraph and allowance of all pending claims.

In the Official Action, the Examiner has rejected the claims as allegedly containing limitations which do not distinctly claim the subject matter recited therein. Specifically, the Examiner objects to the use of the term “azeotrope” and the phrase referring to the distillation boundary. In a conversation held between the Examiner and Applicants’ undersigned representative, the undersigned explained to the Examiner that this is clearly defined in the specification in the paragraph bridging pages 6-7 and thus what is meant by these terms is clear. The Examiner indicated she would take this portion of the specification under advisement and reconsider the rejection. For ease of reference, the discussion from the specification is reproduced below:

As used herein, “distillation boundary line connecting an azeotrope of tert-butanol and water and an azeotrope of 2-butanol and water” means the line which connects the binary water/TBA azeotrope at about 11% by mass of water (the literature reports values at atmospheric pressure of from 10 to 12.5% by mass) (point B in fig. 1) and the binary water/SBA azeotrope at about 28% by mass of water (the literature reports values at atmospheric pressure of from 26.7 to 32% by mass) (point C in fig. 1). This distillation boundary line separates two distillation fields. The above three-component system, shown in figure 1, thus displays two distillation fields: distillation field 1 in the region A-B-C-A and distillation field 2 in the region B-E-D-C-B. In the distillation field 1, the high boiler is water, the low boiler in this region is the TBA/water azeotrope and the intermediate boiler is the SBA/water azeotrope which cannot be separated off in pure form.

The Examiner also objected to Claim 4 based on the removal of water from the industrial mixture before the TBA-containing stream is fed in. During the above-noted discussion, the undersigned also explained to the Examiner that this is a separate set that feeds into the industrial mixture which is then subsequently manipulated in the manner as defined in Claim 1. The water does not have to be completely removed but only reduced to an amount of the azeotrope concentration. Attention is directed to the specification on page 7 in the first two full paragraphs which discusses this embodiment.

Accordingly, and in view of the above, Applicants request withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

To the provisional rejections of Claims 1-16 under the judicially created doctrine of obviousness-type double patenting in view of co-pending application serial no. 10/790,706 by itself or combined with Aron or Rhiel, Applicants request that these rejections be held in abeyance since the alleged conflicting claims have not yet been patented (referring to the discussion in M.P.E.P. § 822.01).

Applicants also request an early indication that all pending claims have been allowed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Norman F. Oblon



Daniel J. Pereira, Ph.D.
Registration No. 45,518

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)